

Department of Environmental Conservation

Mission

Protect human health and the environment.

Core Services

- Develop and enforce standards for protection of the environment.
- Provide controls and enforcement for the prevention and abatement of pollution to the environment.
- Provide controls and enforcement to protect citizens from unsafe sanitary practices.

End Result	Strategies to Achieve End Result
<p>A: The Environment is Protected.</p> <p><u>Target #1:</u> The volume of oil spilled from regulated facilities and vessels in Alaska that are required to have approved contingency plans will not exceed 10% of the total volume of oil spilled.</p> <p><u>Status #1:</u> Less than 4% of the total volume of oil spilled in FY 2009 was from regulated facilities and vessels with approved contingency plans, meeting the program's goal of having no more than 10%.</p> <p><u>Target #2:</u> All municipal solid waste facilities are authorized by the Department of Environmental Conservation.</p> <p><u>Status #2:</u> While 100% of Class I and Class II municipal solid waste facilities within Alaska have the required authorization from the State to operate, only 27% of Class III facilities have been authorized. The Class III level has declined from 31% in FY 2005, showing a significant area of need for increased compliance assistance.</p> <p><u>Target #3:</u> Reduce the impacts of new and historical pollution to land and water.</p> <p><u>Status #3:</u> 63% of the State's polluted land and waterbodies have been restored for public use as of the end of FY 2009, a 4.4% increase from FY 2007.</p>	<p>A1: Contain and Cleanup Pollution in the Environment.</p> <p><u>Target #1:</u> 25% of polluted waterbodies have active stewardship, protection and restoration activities each year.</p> <p><u>Status #1:</u> 50% of polluted waterbodies had active stewardship, protection and restoration activities in FY 2009, an 11% increase from the previous year.</p> <p><u>Target #2:</u> 98% of new oil and hazardous substance spills are cleaned up or are in monitoring status.</p> <p><u>Status #2:</u> Over 99% of new oil and hazardous substance spills in FY 2009 were cleaned up or are in monitoring status, a level maintained for five years in a row.</p> <p>A2: Control Pollution to the Environment.</p> <p><u>Target #1:</u> For communities that have vehicle Inspection and Maintenance (I/M) programs, 95% of vehicles are found to be in compliance with tailpipe emission requirements.</p> <p><u>Status #1:</u> 98% of the vehicles inspected for tailpipe emission compliance, known as the I/M program, were found in compliance in FY 2009, a 6% compliance improvement in 4 years.</p> <p><u>Target #2:</u> 100% of DEC permit-holders are current and in compliance with permit requirements.</p> <p><u>Status #2:</u> 65% of water facility, water quality and air quality permit-holders are current and in compliance with permit requirements.</p> <p>A3: Enforce Pollution Controls.</p> <p><u>Target #1:</u> 100% of criminal violations are investigated and successfully resolved.</p> <p><u>Status #1:</u> 67% of environmental criminal crimes that took place in FY 2009 were successfully investigated and</p>

	<p>resolved within the same fiscal year.</p> <p><u>Target #2:</u> No violations are found during inspections of regulated/permitted facilities and operators.</p> <p><u>Status #2:</u> 87% of environmental plan/permit holders were without violations in FY 2009.</p>
End Result	Strategies to Achieve End Result
<p>B: Citizens are Protected.</p> <p><u>Target #1:</u> No days when air is unhealthy for sensitive groups.</p> <p><u>Status #1:</u> The number of days the air is unhealthy for sensitive groups remains less than two weeks a year.</p> <p><u>Target #2:</u> Keep all unsafe food out of the marketplace.</p> <p><u>Status #2:</u> Over 1.2 million pounds of dairy, seafood and retail foods were detained in FY 2009, more than a million pound increase from FY 2008.</p> <p><u>Target #3:</u> 100% of the population served by a public water system (PWS) is served by systems in compliance with health-based standards.</p> <p><u>Status #3:</u> 94% of the population served by public water systems in FFY 2008 was served by those in compliance with health-based standards.</p> <p><u>Target #4:</u> 100% of serviceable rural Alaska homes are served by safe and sustainable sanitation facilities.</p> <p><u>Status #4:</u> The Village Safe Water Program has seen an annual average increase of 2.5% for serviceable rural Alaska homes served by safe and sustainable sanitation facilities over the past nine years with over 90% being served by the end of FY 2009.</p>	<p>B1: Reduce Health Related Needs</p> <p><u>Target #1:</u> 2.5% increase in rural sanitation health related deficiencies met each year.</p> <p><u>Status #1:</u> Due to the increasing cost of addressing rural sanitation health related deficiencies (such as homes without running water and flush toilets, untreated drinking water, or leaking water and sewer mains) and an ongoing decline of federal funding available to address these deficiencies, the number of health related deficiencies we can address each year is declining. Instead of a 2.5% average annual increase in the percentage of health related sanitation deficiencies being funded, the opposite trend is occurring. Rural Alaska is experiencing a 3.5% average annual decrease.</p> <p>B2: Control Safe Sanitary Practices.</p> <p><u>Target #1:</u> 100% of permitted retail food establishments are inspected at least once each fiscal year.</p> <p><u>Status #1:</u> 30% of permitted retail food establishments were inspected in FY 2009, down 5% from the previous year.</p> <p><u>Target #2:</u> Less than 10% of inspected permitted food establishments and seafood processors have been issued a Notice of Violation (NOV).</p> <p><u>Status #2:</u> 34% of food establishments and 13% of seafood processors that were inspected and permitted were issued a Notice of Violation (NOV) in FY 2009.</p> <p><u>Target #3:</u> Increase the number and types of tests performed to support public health assessments.</p> <p><u>Status #3:</u> 116,223 tests were performed by the Environmental Health Laboratory in FY 2009, an increase of 42% from the previous year.</p> <p><u>Target #4:</u> 2% annual increase in the number of regulated systems that comply with water supply system operator certification requirements.</p> <p><u>Status #4:</u> The operator certification program has seen a 12% increase in three years for the number of regulated systems that comply with water supply system operator certification requirements.</p> <p>B3: Enforce Safe Sanitary Practices.</p> <p><u>Target #1:</u> 100% of inspected permitted retail food establishments are found to have staff with required food</p>

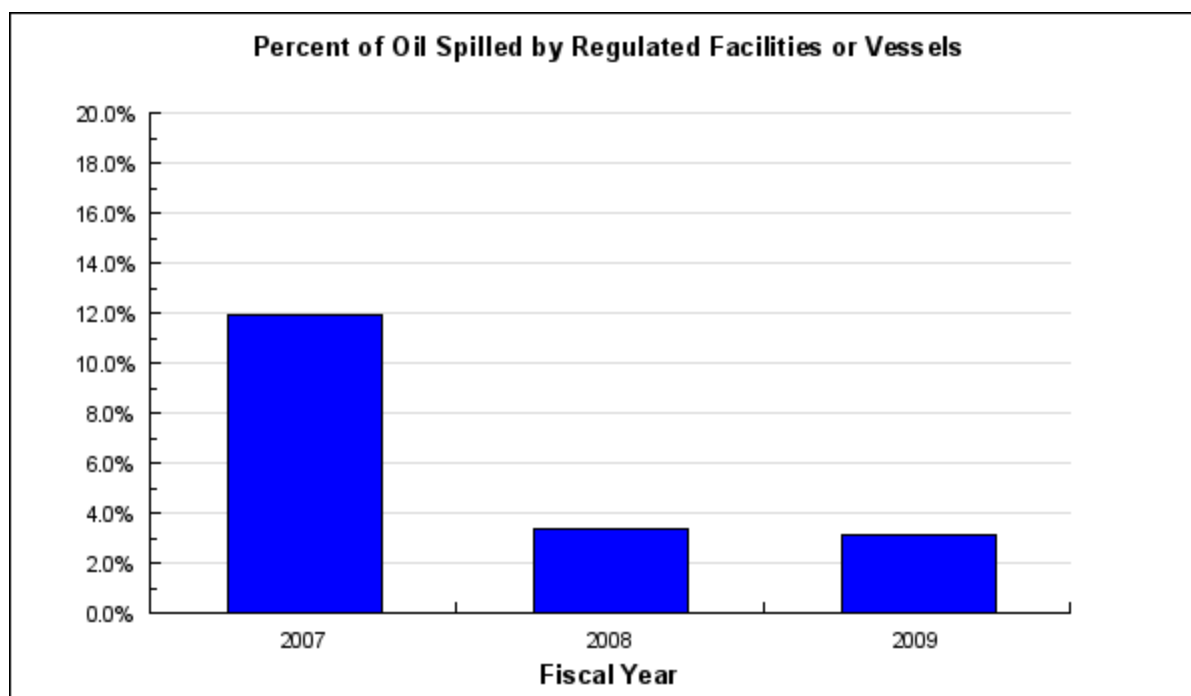
safety training and certification.
Status #1: Approximately 79% of inspected permitted retail food establishments were found during inspection to have staff meeting food safety training and certification requirements, up 5% from the previous year.

Performance Detail

A: Result - The Environment is Protected.

Target #1: The volume of oil spilled from regulated facilities and vessels in Alaska that are required to have approved contingency plans will not exceed 10% of the total volume of oil spilled.

Status #1: Less than 4% of the total volume of oil spilled in FY 2009 was from regulated facilities and vessels with approved contingency plans, meeting the program's goal of having no more than 10%.



Methodology: From the spills database extract total volume of oil spilled by fiscal year. Then extract total volume of oil spilled from a regulated component of a regulated facility. Calculates the % of the total oil spilled that spilled from regulated component.

Percent of Oil Spilled by Regulated Facilities or Vessels

Fiscal Year	Gallons from Regulated	Gallons from All Spills	Percent from Regulated
FY 2009	2,791	88,674	3.1%
FY 2008	8,099	237,223	3.4%
FY 2007	16,884	141,449	11.9%

Analysis of results and challenges: Industry components regulated by the Industry Preparedness Program (IPP) are found in oil exploration, production facilities, refineries, railroads, crude oil pipelines, terminals, tank farms and tankers, non-crude oil tank vessels and barges, and non-tank vessels. The regulatory authority IPP employs is through the requirement of industry oil discharge prevention and contingency plans. Contingency plans require the use of particular technologies and best practices to prevent spills of oil.

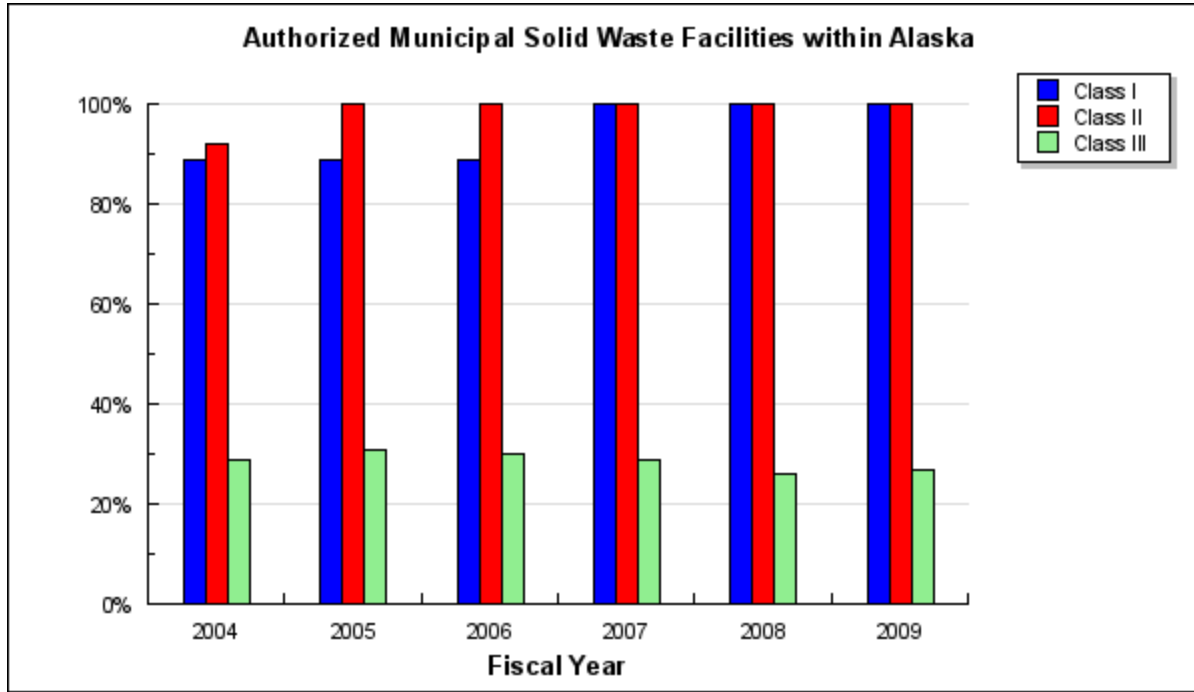
The high percentage in FY 2007 is attributed to spills that occurred at the Prudhoe Bay Oil Field, Kuparuk Oil Field and at the Milepost 178.6 of the Trans-Alaska Pipeline System. It was in FY 2007 that the Greater Prudhoe Bay Oil Field, the largest oilfield in the United States, was temporarily shut down. We are pleased to report a downward trend in spills from regulated components. The new flowline regulations, facility inspections and training have had a positive

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impact in FY 2009.

Target #2: All municipal solid waste facilities are authorized by the Department of Environmental Conservation.

Status #2: While 100% of Class I and Class II municipal solid waste facilities within Alaska have the required authorization from the State to operate, only 27% of Class III facilities have been authorized. The Class III level has declined from 31% in FY 2005, showing a significant area of need for increased compliance assistance.



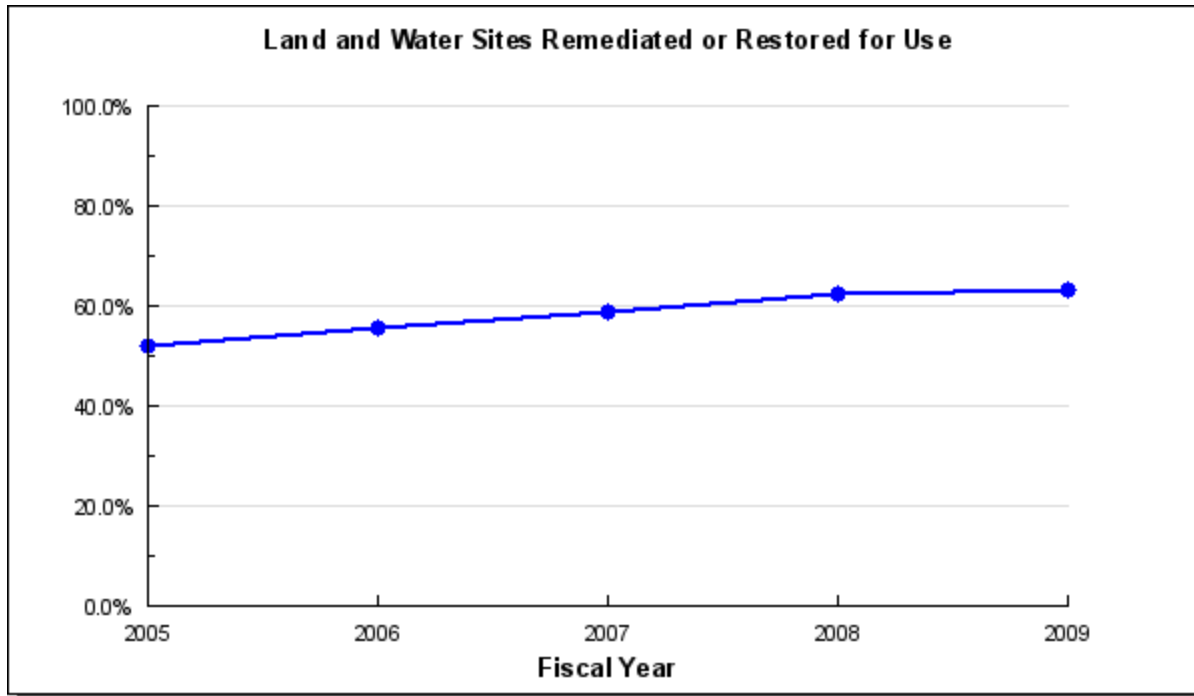
Methodology: The measure is calculated by dividing the number of authorized landfills in each classification by the total number of landfills in each classification.

Analysis of results and challenges: Municipal landfills are classified based on the average daily intake of waste and include Class I (greater than 20 tons/day), Class II (five to 20 tons/day), and Class III (less than five tons/day) landfills. In FY 2009 the total number of municipal landfills included nine Class I landfills, 14 Class II landfills, and 219 Class III landfills. Despite the relatively high number of facilities, only about 10% of the municipal waste generated in Alaska is disposed in Class III landfills. All municipal landfills are required to have either a permit or other DEC authorization to ensure that the landfill's design and operational practices comply with regulatory standards. Compliance with the standards is what marks the difference between an approved landfill and an open dump.

As documented in the graph, all of Alaska's Class I and Class II landfills have current permits to operate, but only about 27% of Class III landfills are currently authorized. Anticipation of a new, simplified permitting process for Class III landfills has caused some Class III landfill operators to delay permit renewal efforts for permits that expired in FY 2006, FY 2007, and FY 2008, causing the decrease in permitted Class III landfills shown in the graph. As implementation of that simpler permitting process is still pending, the Solid Waste program has been working with those operators to renew the lapsed permits. While this has increased the number of permitted Class III landfills, there is still much work to be done to reach the 100% target.

Target #3: Reduce the impacts of new and historical pollution to land and water.

Status #3: 63% of the State's polluted land and waterbodies have been restored for public use as of the end of FY 2009, a 4.4% increase from FY 2007.



Methodology: This measure includes data related to Category 4 and Category 5 polluted waters that were restored each fiscal year as well as active contamination sites that were closed or restored for use during the same fiscal year.

Analysis of results and challenges: The number of polluted waters has slowly declined since FY 2005. More waters have been restored than have become polluted during this period. The challenge in reducing the number of polluted waters is recognizing that pollution is a dynamic situation. Even as polluted waterbodies are being restored, new waterbodies may become polluted due to the growth in Alaska's population and the associated urban development. Pollution pressures are also being seen in rural areas that are heavily used for recreation, tourism and fishing. The key to making progress in reducing the number of polluted waters is to control pollution before it reaches the environment through wastewater discharge permits, best management practices and other controls for non-point source pollution (i.e. small sources that are not controlled by permits such as motor boats).

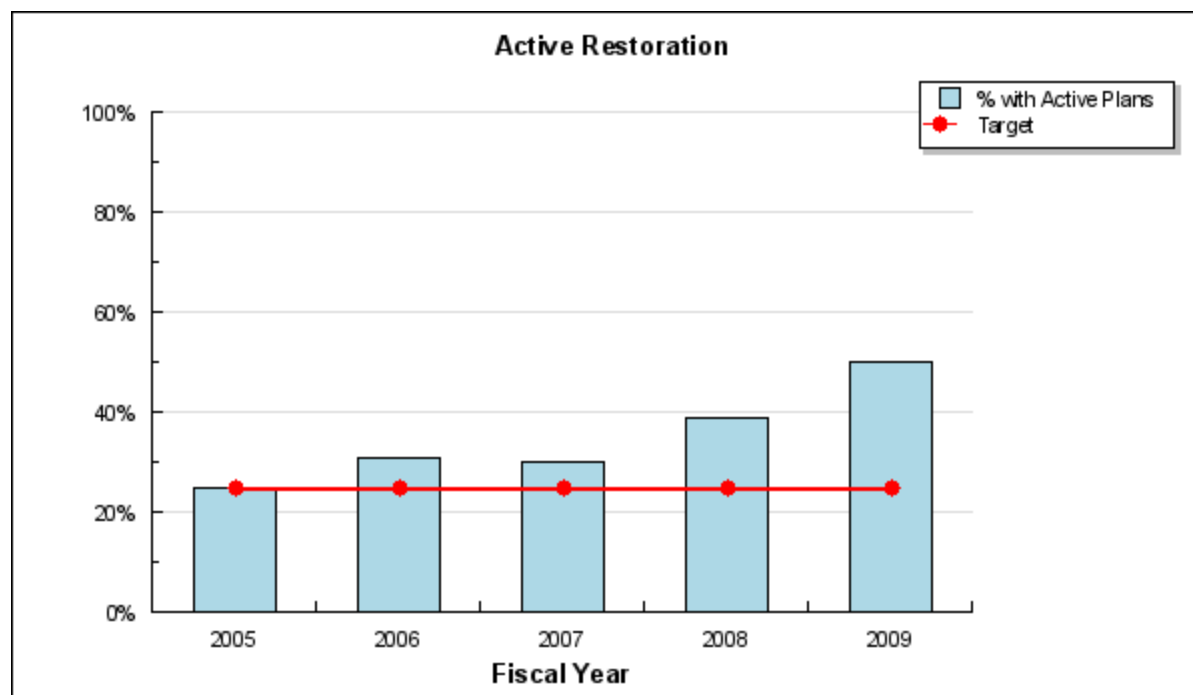
The number of open sites contaminated with oil or hazardous substances has declined overall since FY 2005 while the total number of active contaminated sites continues to grow as new historical sites are discovered and transferred from the Spill Response Program to the Contaminated Sites Program within the Department's Spill Prevention and Response Division. The complexity of existing projects and associated closures, the level of resources available to provide regulatory oversight and the cleanup itself continue to be challenges faced in closing and restoring sites for use by the public.

In FY 2009, there were 62 contaminated waterbodies and 2,983 open historical contaminated sites. 8 waterbodies and 181 historical contamination sites were restored.

A1: Strategy - Contain and Cleanup Pollution in the Environment.

Target #1: 25% of polluted waterbodies have active stewardship, protection and restoration activities each year.

Status #1: 50% of polluted waterbodies had active stewardship, protection and restoration activities in FY 2009, an 11% increase from the previous year.



Methodology: Stewardship, protection and restoration projects may be conducted by grantees who have received funds through the Alaska's Clean Water Actions (ACWA) grant program, by contractors, by other State agencies, or by DEC personnel. The number of these projects is then divided by the number of total polluted waters as determined in the Integrated Water Quality Monitoring and Assessment Report to calculate the percentage of waters with active restoration projects.

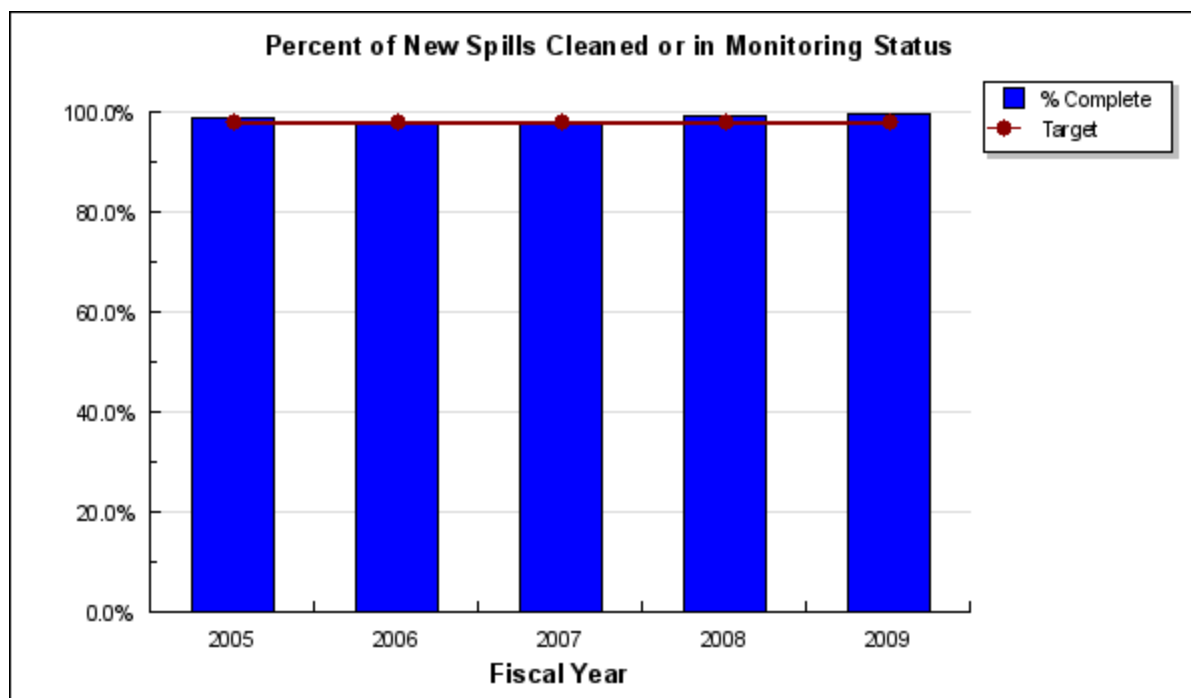
Analysis of results and challenges: The number of stewardship, protection and restoration projects has remained relatively stable since 2005: 18 projects were completed in FY 2005, 22 projects in FY 2006, 21 projects in FY 2007, 24 projects in FY 2008, and 31 projects in FY 2009. Over the same period, the number of polluted waterbodies has declined from 71 polluted waters in FY 2004 to 62 polluted waters in FY 2008. Therefore, the percentage of polluted waters for which the state has ongoing projects continues to rise over this period.

Prioritizing actions on threatened and polluted waters is done through the Alaska Clean Water Act (ACWA) program, which is a cooperative effort of DEC, the Department of Fish and Game and the Department of Natural Resources. The ACWA program provides a consolidated approach for a complete assessment of the health and status of any particular waterbody. Likewise, it provides a means to coordinate the use of State funds so that they can be directed to those projects that truly represent the State's highest priorities.

Maintaining active participation of multiple agencies using multiple funding sources continues to be a challenge. Funding provided by the different agencies has different requirements, resulting in a balancing act to match funding with eligible projects. In addition, ensuring timely information is available about specific waters is also a challenge. Non-federal match for ACWA grants is provided by grantees. General funds are necessary as match to federal funding for some restoration projects accomplished by contractors, other state agencies and DEC. The ACWA program is addressing these hurdles through development of a collaborative interagency database as well as on-going discussions of development actions consistent with funding restrictions.

Target #2: 98% of new oil and hazardous substance spills are cleaned up or are in monitoring status.

Status #2: Over 99% of new oil and hazardous substance spills in FY 2009 were cleaned up or are in monitoring status, a level maintained for five years in a row.



Methodology: The percent of new spills cleaned or in monitoring status is determined each year by dividing the number of new spills cleaned up by the total number of new spills.

Percent of New Spills Cleaned or in Monitoring Status

Fiscal Year	New Spills Reported	Cleaned or in Monitoring	% Complete
FY 2009	2,164	2,158	99.7%
FY 2008	2,019	2,004	99.3%
FY 2007	2,312	2,239	98.1%
FY 2006	2,197	2,158	98.2%
FY 2005	2,049	2,022	98.7%

Analysis of results and challenges: The quicker an oil or hazardous substance spill is contained and cleaned up, the less impact it will have on human health, the environment, and the economy. Our goal is to respond to, control, contain, and clean spills as they occur and prevent them from causing wide-spread damage to water sources, land, wildlife and adjoining properties.

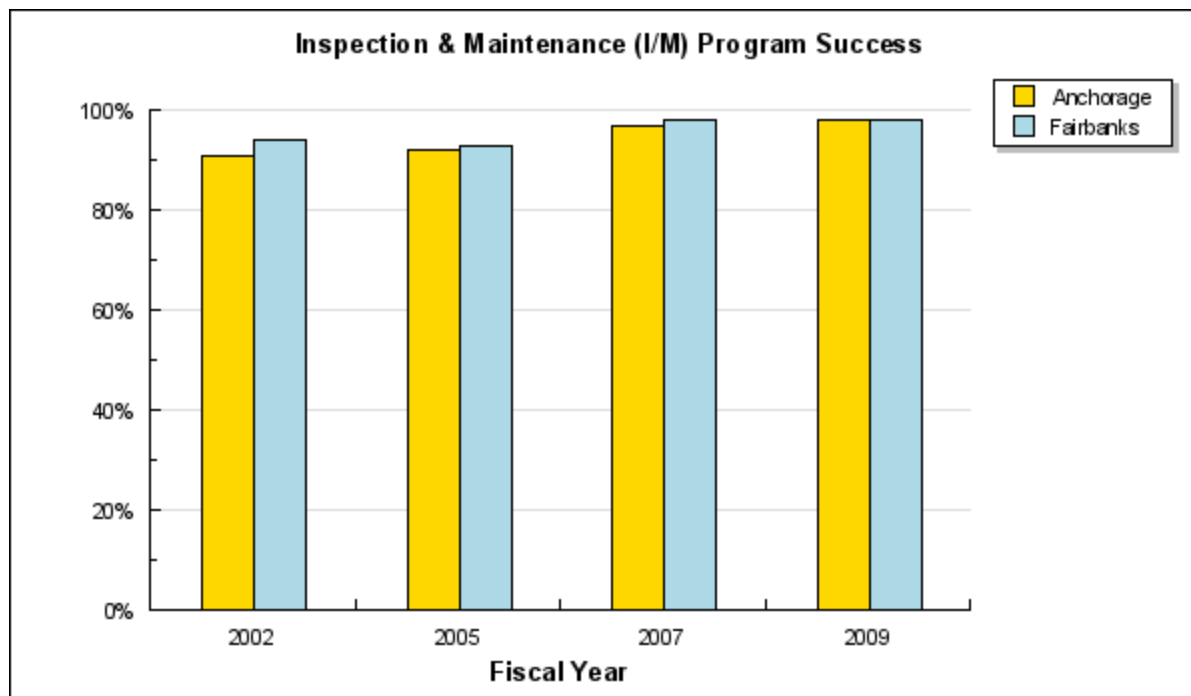
When spill cases are in monitoring status they have been cleaned to a point that allows continued use of the spill site and no longer present a threat of contaminant movement to groundwater or to adjacent properties. Frequently, this will include removing and storing contaminated soils; these soils are monitored during field visits until treatment has reduced the contamination levels to that which meets acceptable state standards.

The FY 2009 data indicates that over 99% of new spills are contained, cleaned up, or are in monitoring status.

A2: Strategy - Control Pollution to the Environment.

Target #1: For communities that have vehicle Inspection and Maintenance (I/M) programs, 95% of vehicles are found to be in compliance with tailpipe emission requirements.

Status #1: 98% of the vehicles inspected for tailpipe emission compliance, known as the I/M program, were found in compliance in FY 2009, a 6% compliance improvement in 4 years.



Methodology: A visual survey of in-use vehicles is conducted every other year in Anchorage and Fairbanks, recording the license plate and windshield information. Compliance rates are calculated from the data collected. The compliance rate is the ratio of the total number of vehicles found to be in compliance with the I/M program versus the total number of vehicles sighted during the survey that are required to meet the I/M requirements.

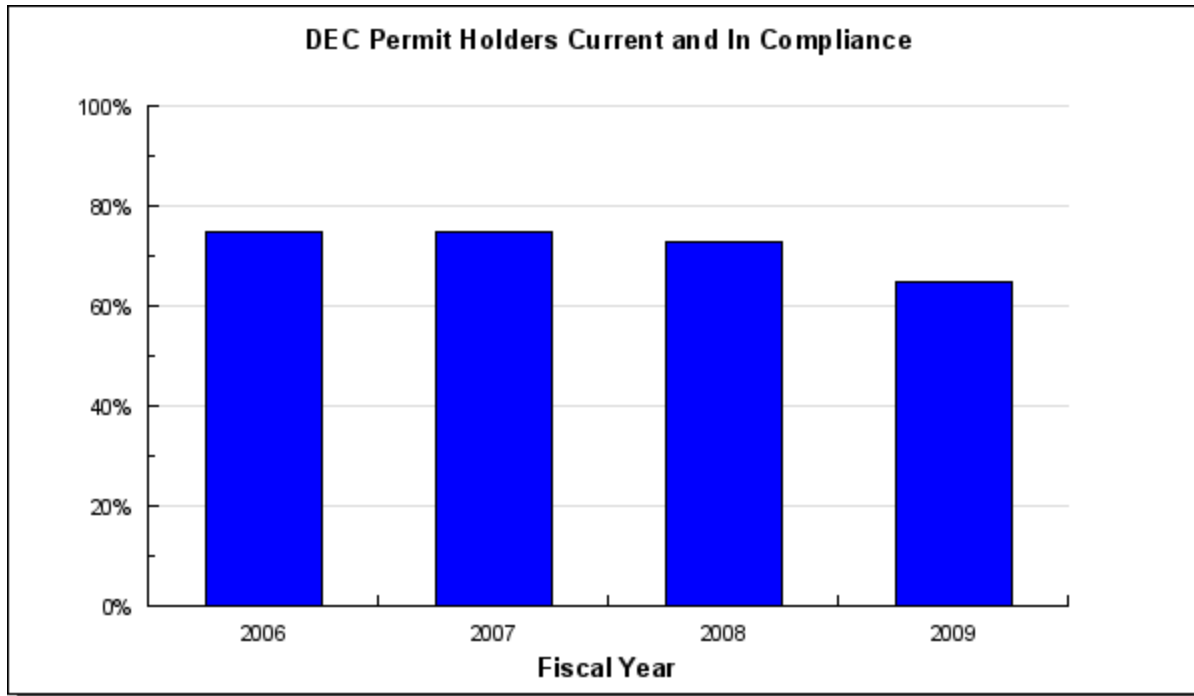
Analysis of results and challenges: Results indicate that efforts by local communities, the Department of Environmental Conservation and the Division of Motor Vehicles to educate and enforce I/M requirements are working. Compliance rates are at their highest levels since the start of the local programs in the mid 1980's. These compliance rates meet the commitment made in the State Air Quality Control Plan.

Challenges revolve around the continued necessity for education and enforcement as long as programs are in place. This is due to people moving in and out of I/M areas and the incentive for individuals to either evade or be out of compliance when costly vehicle emission component repairs are required.

For more information on the I/M program, please visit: <http://www.dec.state.ak.us/air/anpms>

Target #2: 100% of DEC permit-holders are current and in compliance with permit requirements.

Status #2: 65% of water facility, water quality and air quality permit-holders are current and in compliance with permit requirements.



Methodology: Data includes operator certifications, water discharge permits, Corps of Engineers 404 permits and air quality permits.

Analysis of results and challenges: The Department issues a variety of permits to help ensure operators are doing their part to help protect the environment and citizens from pollution. Each program monitors to ensure permit-holders are current and in compliance with the requirements of those permits through inspections and reviews of permit renewal applications.

For the water supply system operator certification program, which ensures operators have the qualifications necessary to meet the responsibility of safeguarding public health, a compliance rate of 69% was achieved in FY 2009.

The water discharge program regulates permits for domestic wastewater, seafood processing, fish hatcheries, and log-transfer facilities. The Department is in the process of inheriting responsibility for these types of permits from the Environmental Protection Agency (EPA) and while compliance is currently 35%, that rate is expected to fluctuate as new permit holders and backlogged permits are inherited from the EPA in the coming years.

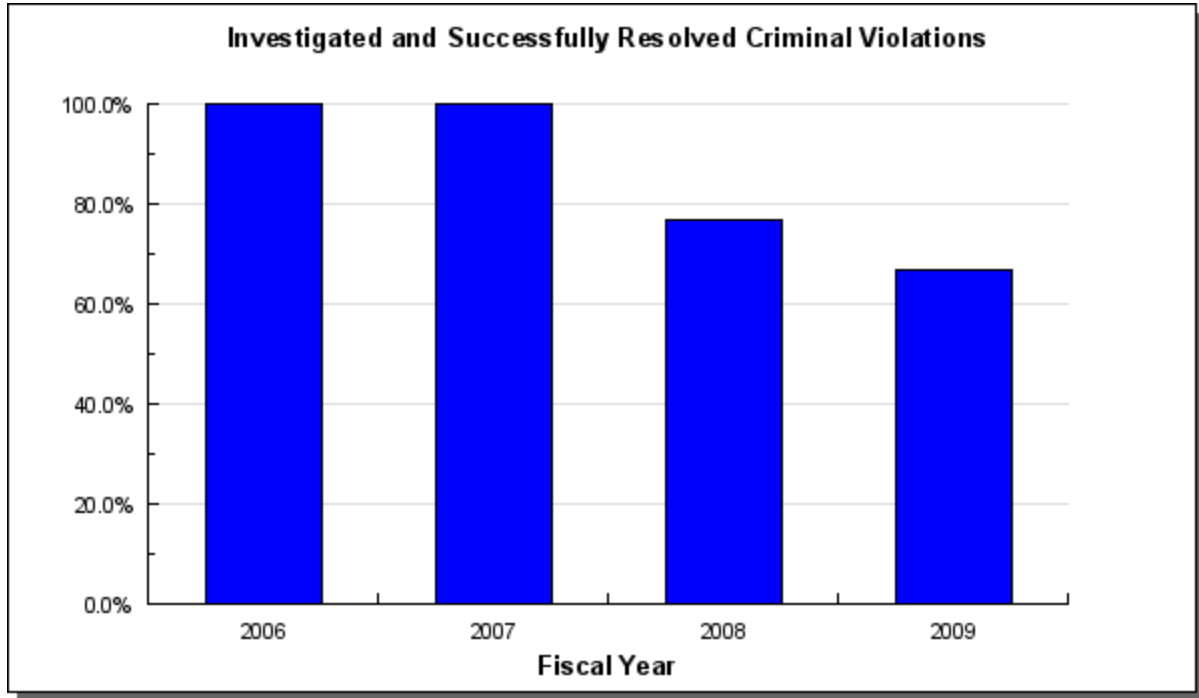
The Army Corps of Engineers dredge and fill ("404") permits ensure that wetland fill issued by the Corps do not negatively impact the water quality through provisions of the Clean Water Act. Many routine Army Corps projects are not reviewed since the agencies have agreed upon standard protective measures for them. Larger projects do require review, although the Department can waive review if impacts from them are considered minor. In FY 2009, 73% of these permits were certified; the remaining 27% were administratively waived.

The air quality permit program requires major and some minor stationary sources' compliance be tracked. Under federal compliance reporting, status reverts to "unknown" if compliance is not evaluated in the past two years for major sources or five years for minor sources. These sources are assumed to be in compliance for the purposes of this measure as the majority of the sources are minor sources not required to be evaluated under the state and federal compliance assurance agreement. In FY 2009, 91% were compliant.

A3: Strategy - Enforce Pollution Controls.

Target #1: 100% of criminal violations are investigated and successfully resolved.

Status #1: 67% of environmental criminal crimes that took place in FY 2009 were successfully investigated and resolved within the same fiscal year.



Methodology: Criminal violations investigated and successfully resolved by the Department's Environmental Crimes program.

Analysis of results and challenges: Normally environmental violations are enforced by DEC's regulatory staff through administrative or civil remedies. However, when harmful conduct becomes intentional, knowing, or reckless, criminal enforcement must be considered.

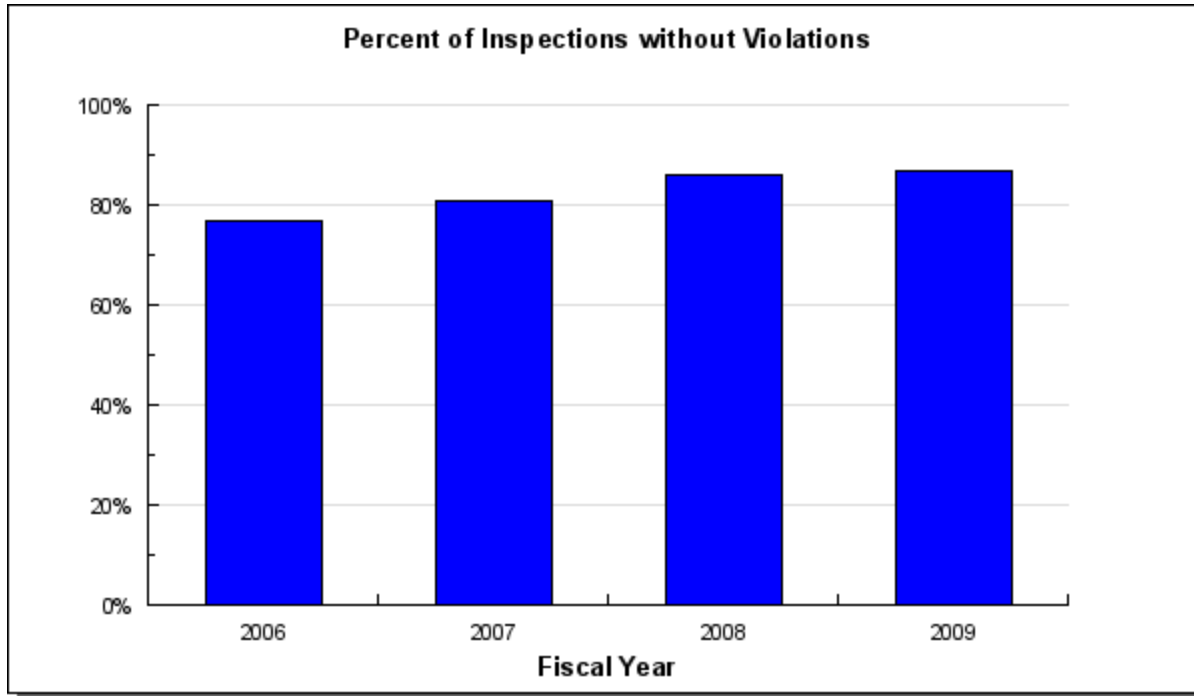
The Environmental Crimes Unit is responsible for investigating the most complex and egregious violations of environmental law. Violators must be identified and sufficient evidence collected in order to successfully resolve an investigation. The effectiveness of this unit can be measured by its ability to successfully resolve a high percentage of reported criminal violations.

There were nine criminal investigations initiated by the Environmental Crimes unit in FY 2009. Of those nine investigations six have been resolved. The remaining cases were still under investigation at the end of the fiscal year, thus the percentage of criminal investigations successfully investigated and resolved for FY 2009 is at 67%.

Due to the complexities of many of these investigations, they are not resolved in the same fiscal year as reported, but will be resolved in the following fiscal year and will be reflected in the year the violation was received after being resolved. Therefore, previous year percentages continue to increase towards 100% as cases are resolved.

Target #2: No violations are found during inspections of regulated/permited facilities and operators.

Status #2: 87% of environmental plan/permit holders were without violations in FY 2009.



Methodology: Data includes violations found through pesticide enforcement, regulated facilities and vessel contingency plan reviews and drinking water facility inspections and follow-up requirements.

Analysis of results and challenges: Inspections are conducted by various programs within the Department to ensure permits, authorizations and regulations are being followed properly to minimize risk both to the environment and to people. When violations are found, a Notice of Violation is issued and items needing correction are often identified.

The Department inspections of pesticide use include the storage, sale, use, and disposal of the materials and containers and takes active enforcement actions when violations are found. Due to the nature of pesticides, strict compliance with the regulations and the product label is critical. Violators are individuals or facilities that are cited for a pesticide violation. In FY 2009, 4% of inspections resulted in a Notice of Violation being issued.

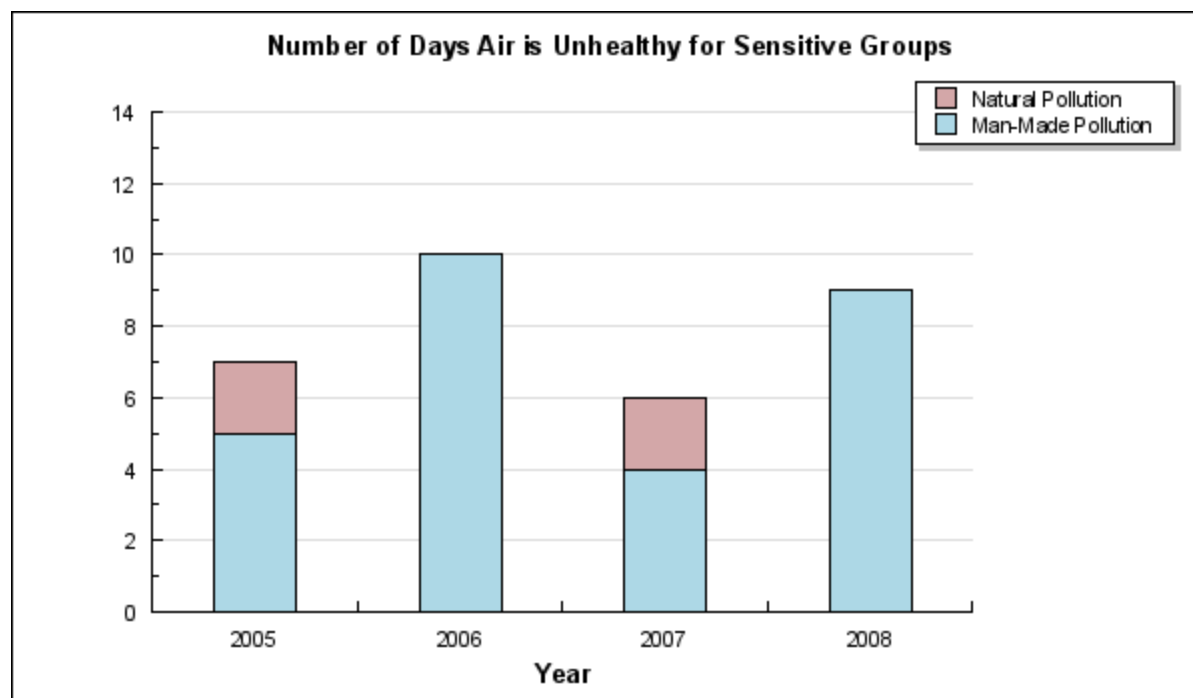
In the Spill Prevention and Response Division, facilities are required to have full contingency plans if they fall into one of the following categories: oil exploration and production facilities, refineries, railroads, crude oil pipelines, fuel terminals, crude oil tankers, non-crude tankers and barges. Vessels larger than 400 GRT (for example cruise ships with large cargo and fishing vessels) are also required to have contingency plans, but are subject to somewhat different requirements. Before approving a plan, the Department conducts a thorough review to ensure that all response requirements are addressed. During FY 2009 inspections, 3% of non-tank vessels and 4% of regulated facilities were found to have major violations to their contingency plans.

The Drinking Water program supports technical assistance through training and approving the onsite inspectors, and also provides the service of completing sanitary surveys. However, if monitoring for contaminants, reporting, or sanitary surveys are not completed; the program is responsible for enforcement. Compliance and technical assistance actions are focused educational and information-oriented activities to increase Alaska public water system owners' and operator's abilities to more effectively operate their systems, thereby reducing the necessity for enforcement. In FY 2009, 1.6% of drinking water systems were issued a Notice of Violation.

B: Result - Citizens are Protected.

Target #1: No days when air is unhealthy for sensitive groups.

Status #1: The number of days the air is unhealthy for sensitive groups remains less than two weeks a year.



Methodology: Data is calculated using sampling information from samplers in the Municipality of Anchorage, City and Borough of Juneau, the Fairbanks North Star Borough and the Mat-Su Valley.

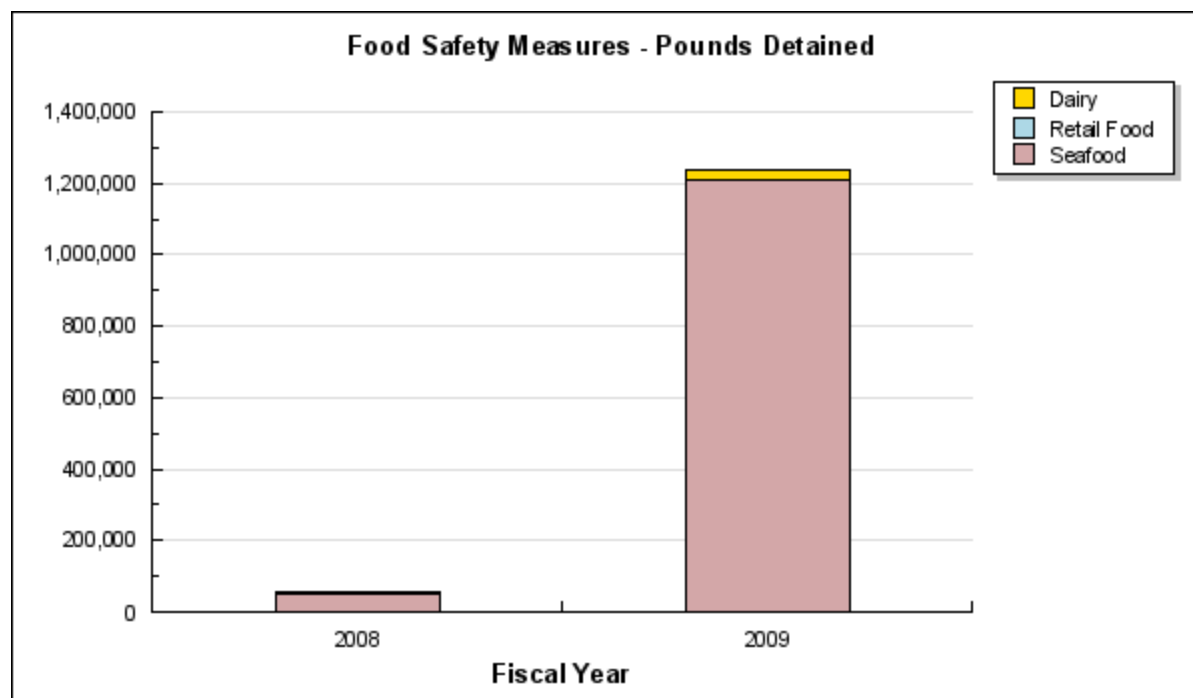
Analysis of results and challenges: The data for the 2009 calendar year will be available in March 2010.

DEC has been collecting ambient air data in most major communities around the state for over 25 years. Air monitoring is performed to ensure compliance with the National Ambient Air Quality Standards designed to protect public health. The U.S. EPA sets health based standards for particulate matter and gaseous pollutants. In the state, the pollutants of concern are carbon monoxide, fine particulate matter and coarse particulate matter. Violations of the standards occur when the concentration of air pollution rises above the limit either through natural events or through emissions from man-made sources. Natural pollution includes smoke from wild fires (fine particulate matter called PM_{2.5}), ash from volcanic eruption or windblown dust from gravel bars and other exposed gravel surfaces (coarse particulate matter called PM₁₀). Man-made pollution is produced by exhaust from combustion processes, such as diesel and gas vehicle emissions and emissions from home heating systems like wood stoves. Since 2000 no violations of the Carbon Monoxide (CO) standards have been recorded.

The chart shows the number of days the air quality was unhealthy for sensitive groups, including children, the elderly, and people with heart or lung disease. In 2005 and 2007 the natural pollution was caused by windblown dust. In 2008, nine days exceeded the National Ambient Air Quality Standard for fine particulate matter (PM_{2.5}). Juneau's Mendenhall Valley experienced two days when ambient air measurements exceeded standards and Fairbanks experienced seven days. The pollution on all nine days was caused by human activity. A non-attainment designation for the Fairbanks North Star Borough is pending. The State is working with the Borough to evaluate the extent of the pollution problem and to tailor control strategies for elimination of the fine particulate problem within the Fairbanks bowl. More information about DEC's air monitoring projects throughout the state, including PM₁₀ and regional haze, can be found at <http://www.dec.state.ak.us/air/am/index.htm>

Target #2: Keep all unsafe food out of the marketplace.

Status #2: Over 1.2 million pounds of dairy, seafood and retail foods were detained in FY 2009, more than a million pound increase from FY 2008.



Methodology: Seafood pounds detained and retail food pounds detained are the sum of pounds reported detained or voluntarily destroyed as reported in the Food Safety and Sanitation Program "Digital Health Department" database.

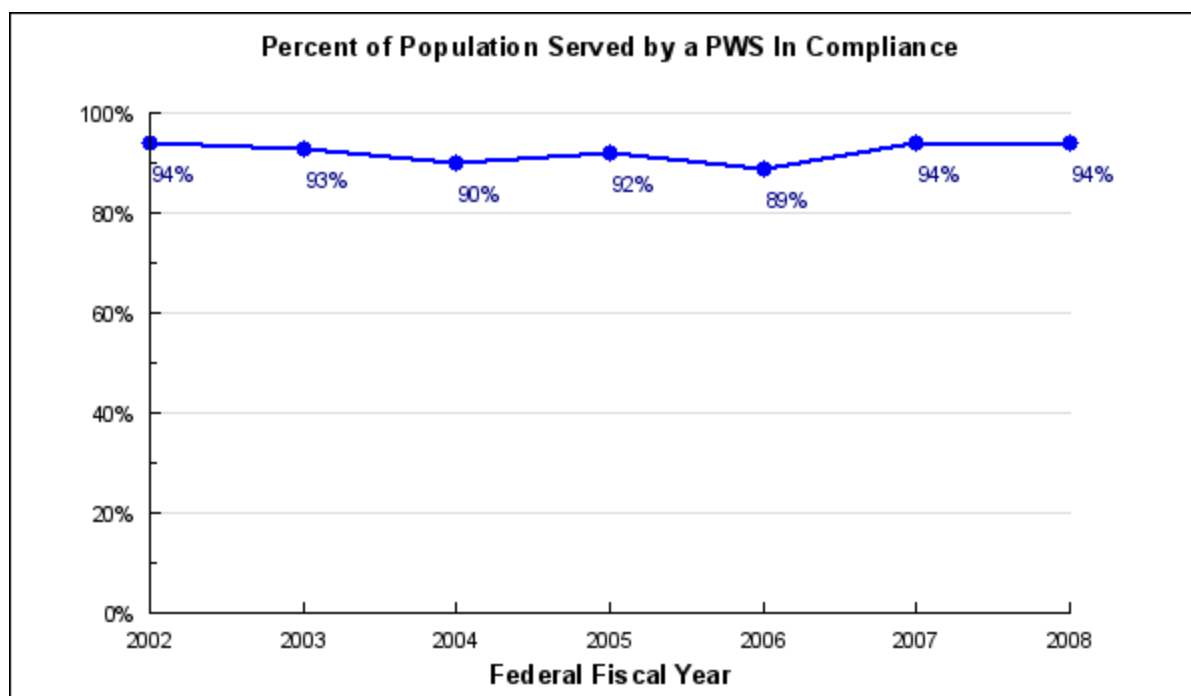
Food Safety Measures - Pounds Detained

Fiscal Year	Seafood	Retail Food	Dairy	Total Pounds
FY 2009	1,210,118	351	25,780	1,236,249
FY 2008	52,100	4,100	260	56,460

Analysis of results and challenges: Potentially unsafe food may be identified through inspections, complaints, routine testing of product or recalls. The measure only includes food which has been identified as unsafe. Reasons for unsafe food may include unapproved source, adulteration with contaminants or unapproved ingredients, improper processing, labeling or packaging. Depending upon the food safety problem, it may be possible to recondition the food, divert it to animal feed, or fix the labeling or packaging problem. If the problem cannot be fixed, the food is destroyed. The FY 2009 increase in seafood detentions over the previous fiscal year is due to the detention and destruction of 595,265 pounds of product found contaminated or decomposed on inspection and 541,300 pounds of product detained at a processor operating without a permit, which was released after the facility became permitted. The reduction from the previous year in retail food detained is due to less retail inspections and less product shipped to Alaska which was subject to national recall. Also in FY 2009, State-owned Matanuska Maid Dairy closed prior to the completion of a new facility, Matanuska Creamery, being constructed in Wasilla. The creamery did not have an approved permitted pasteurization facility to process fluid milk products but was permitted and capable of processing raw milk to produce raw milk cheese. The creamery produced 25,780 pounds of raw milk cheese prior to becoming permitted to process pasteurized milk products. Although the creamery followed guidelines for the aging process, the final product tested positive for *Listeria monocytogenes* and this finding was confirmed by a contract laboratory. All batches of the raw milk cheese product were detained. Subsequently, the creamery has produced cheese and frozen desserts made from pasteurized milk, as well as pasteurized milk products; all products have met department standards and no other products have been detained.

Target #3: 100% of the population served by a public water system (PWS) is served by systems in compliance with health-based standards.

Status #3: 94% of the population served by public water systems in FFY 2008 was served by those in compliance with health-based standards.



Methodology: The information reflected in this table is provided on an annual basis by the Environmental Protection Agency (EPA) after the end each federal fiscal year (typically October). The numbers being reported are the number of Public Water Systems that are in compliance with the health-based standards (Treatment Technique and Maximum Contaminant Level requirements).

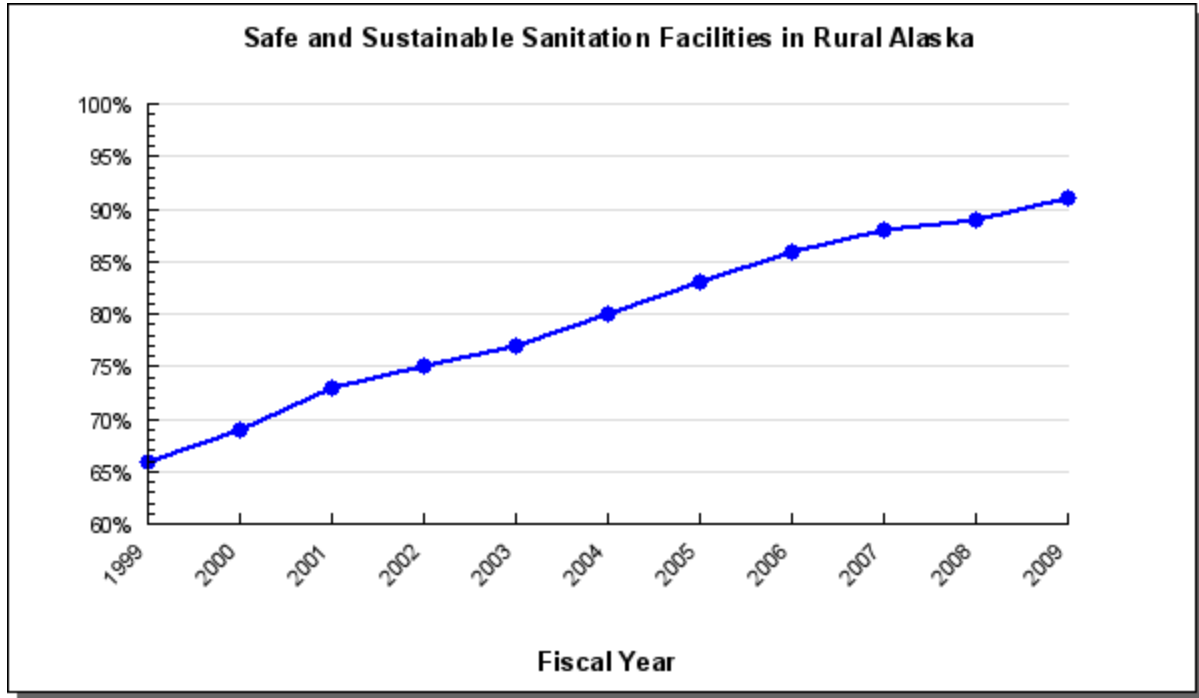
Analysis of results and challenges: Data for this measure is available in late-October of each year, and therefore data for FFY 2009 is not yet reported.

To address the threat of waterborne disease and provide for the protection of public health, the State of Alaska was delegated primacy in 1978 and began the adoption and implementation of Safe Drinking Water Act (SDWA) requirements which made the Drinking Water Program responsible for implementation of the SDWA within the State. All federally regulated public water systems are required to be in compliance with the SDWA. Various health-based standards contained within the Act are designed to protect people from consuming unsafe drinking water. Health-based standards are EPA established limits for many chemical and radiological contaminants, called Maximum Contaminant Levels (MCLs), as well as microbiological contaminants. The MCL is an enforceable standard that all public water systems must meet in order to serve drinking water to the public. There are also various treatment technique criteria that public water systems must meet. Treatment techniques have to do with the way water is treated to make it potable and safe for human consumption. All of these criteria make up the health-based standards.

The Drinking Water Program offers a two-pronged approach of compliance assistance and enforcement, allowing staff to have appropriate oversight of the Public Water System (PWS) serving safe drinking water to as many people as possible. The increasing number of complex federal drinking water rules, such as Long Term 1 and 2 Enhanced Surface Water Treatment Rules, and the Disinfectant/Disinfection By-Products, Stage 2 Rule, challenges the resources of both the DW program and the PWS owners and operators. That accounts for the decrease in FFY 2006.

Target #4: 100% of serviceable rural Alaska homes are served by safe and sustainable sanitation facilities.

Status #4: The Village Safe Water Program has seen an annual average increase of 2.5% for serviceable rural Alaska homes served by safe and sustainable sanitation facilities over the past nine years with over 90% being served by the end of FY 2009.



Methodology: Total number of serviceable housing units divided by total number of homes connected for service.

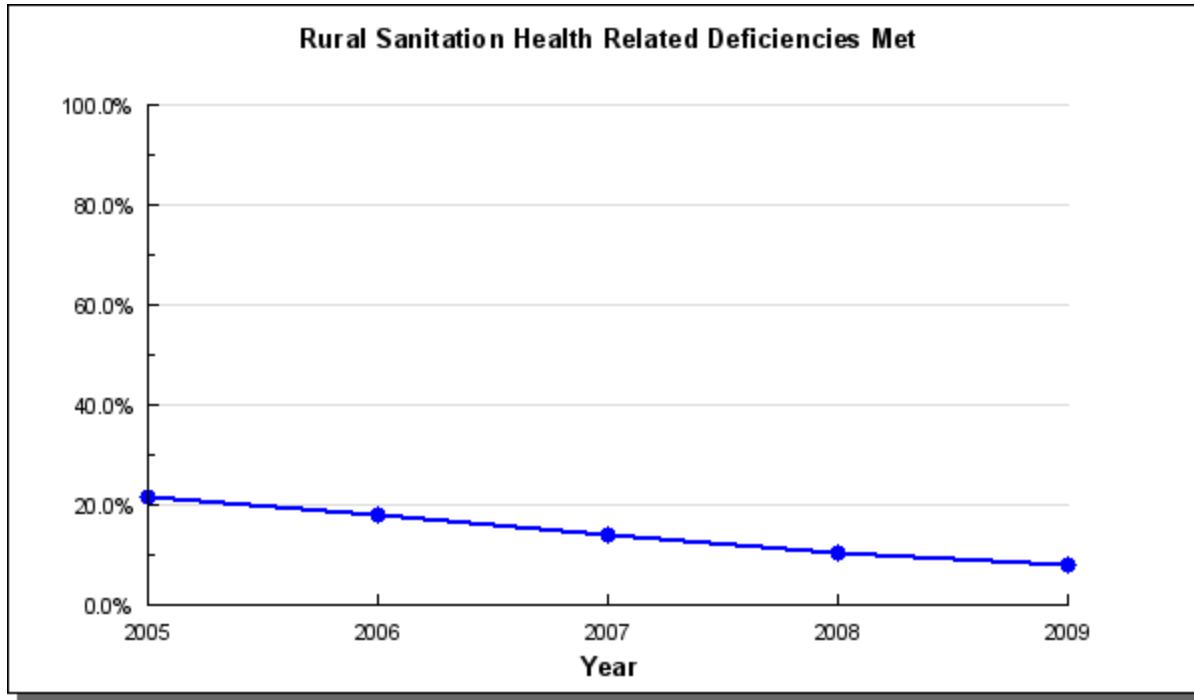
Analysis of results and challenges: The Village Safe Water program is making progress in achieving its goal that 100% of year round occupied homes have access to piped, closed haul or individual septic tanks/wells. This goal is limited to rural households in communities that have the financial, managerial and technical capacity to properly operate a facility once it is built and where these types of systems are physically feasible.

The baseline year for this measure is FY 1999 when 66% of rural homes were served by adequate sanitation systems. Compared to the 91% of households served in FY 2009, this equates to a 25% increase or an annual average increase of 2.5% – which is the program's target. However, the pace of progress has slowed in recent years (an average annual increase of only 1.6% from FY 2006 – FY 2009) as federal and State funding for the program has sharply declined. The percentage increase in homes served between FY 2008 and FY 2009 was 2%. Continuing to meet the program's target of an annual average increase of 2.5% in the number of rural Alaska homes served by adequate sanitation systems will be largely contingent upon the availability of adequate federal and State funding.

B1: Strategy - Reduce Health Related Needs

Target #1: 2.5% increase in rural sanitation health related deficiencies met each year.

Status #1: Due to the increasing cost of addressing rural sanitation health related deficiencies (such as homes without running water and flush toilets, untreated drinking water, or leaking water and sewer mains) and an ongoing decline of federal funding available to address these deficiencies, the number of health related deficiencies we can address each year is declining. Instead of a 2.5% average annual increase in the percentage of health related sanitation deficiencies being funded, the opposite trend is occurring. Rural Alaska is experiencing a 3.5% average annual decrease.



Methodology: Annual funding for sanitation improvements available divided by total health related need.

Analysis of results and challenges: A number of factors, including federal regulatory requirements, aging facilities, and inflation, have resulted in a significant increase in the estimated cost of constructing projects to address health related sanitation deficiencies in rural Alaska. While costs have escalated, federal and State funding for rural sanitation projects has diminished. This disparity has resulted in a sharp decrease in the percentage of health related deficiencies addressed each year.

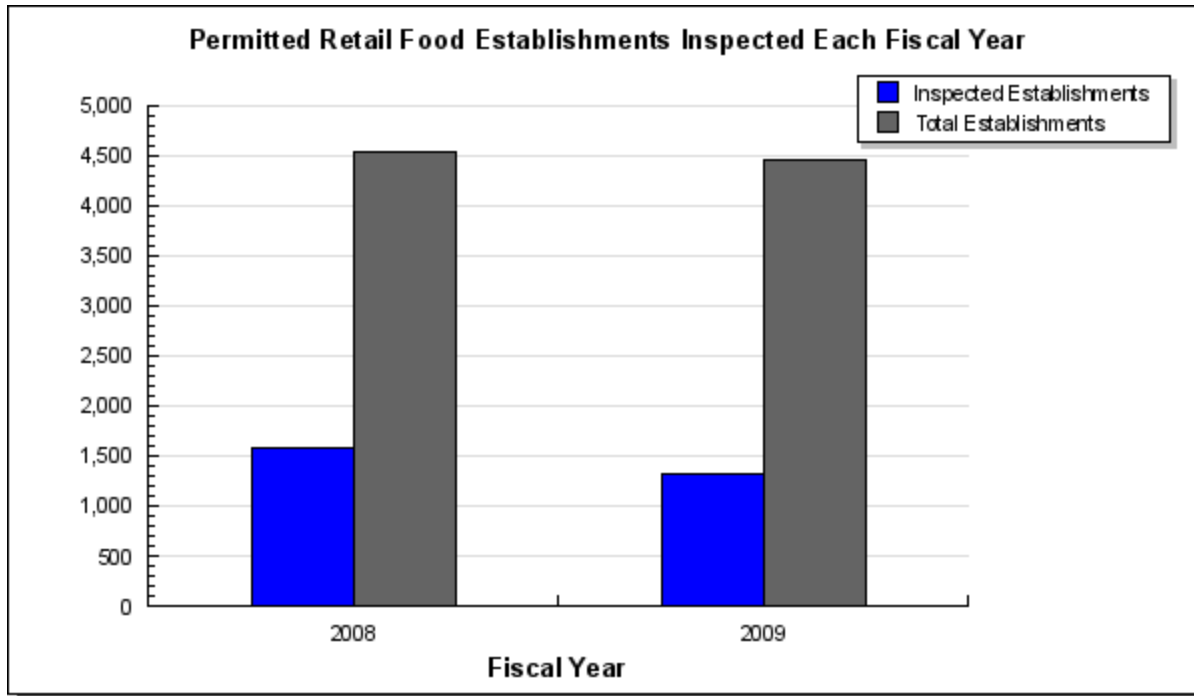
In 2005 (this target's baseline year), the estimated cost of addressing health related sanitation needs in rural Alaska was \$433.6 million; State and federal funding to address those needs was \$94.7 million (\$433.6 million divided by \$94.7 million = 21.8% of needs were funded). In 2009, the estimated cost of addressing health related sanitation needs in rural Alaska rose to \$675 million and State and federal funding to address those had shrunk to \$53.6 million (\$675 million divided by \$53.6 million = 7.9% of needs were funded).

Instead of a 2.5% average annual increase in the percentage of health related sanitation deficiencies being funded, rural Alaska is experiencing a 3.5% average annual decrease. While the Village Safe Water program continues to target limited resources toward sanitation projects with the highest health related need, unless there is a significant change in need versus funding trends, the average annual percentage of health related deficiencies addressed will continue to decline.

B2: Strategy - Control Safe Sanitary Practices.

Target #1: 100% of permitted retail food establishments are inspected at least once each fiscal year.

Status #1: 30% of permitted retail food establishments were inspected in FY 2009, down 5% from the previous year.



Methodology: Sum of permitted food establishments and sum of permitted food establishments inspected once as reported in the Food Safety and Sanitation Program's "Digital Health Department" database. Note - does not include an approximate 500 temporary food establishments.

Analysis of results and challenges: The Food Safety and Sanitation Program has 24 full time equivalent field positions in ten offices statewide who undertake retail food inspections along with seafood and public facility sanitation inspections.

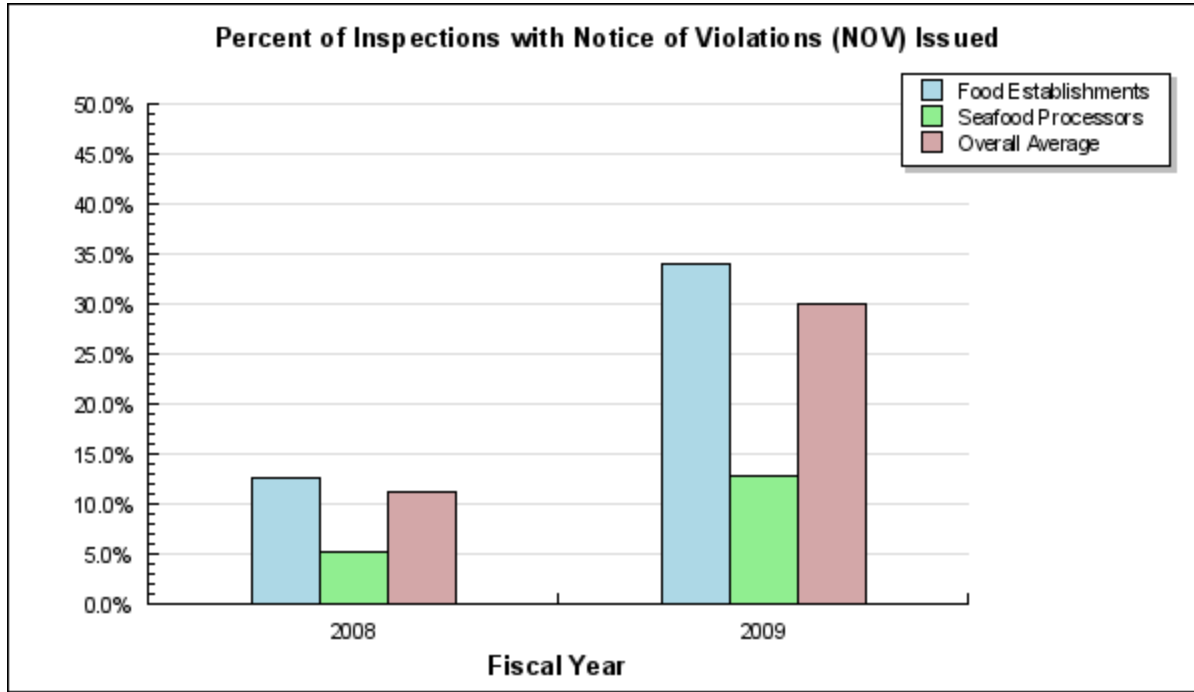
High risk facilities include establishments such as full service restaurants, nursing homes, and food processors. Medium risk facilities include quick service operations, schools not serving a highly-susceptible population, and retail food store operations. Low risk facilities include coffee stands, hot dog carts, and convenience store operations.

In FY 2009, there were 4,451 permitted permanent food establishments. During FY 2009, staff inspected 30% of those establishments. More specifically, they visited 41% of high risk retail food facilities (1279 facilities), which is a 2% reduction from the previous year and 28% of medium risk retail food facilities (1267 facilities, which is a 5% reduction from the previous year. Low risk facilities (1622 facilities and 283 facilities not yet ranked) are only inspected when complaints are received or if the opportunity arises when in a community. The reduction in retail facility inspections is due to a high vacancy factor among field inspectors is due to issues associated with recruitment, retention, the FY 2009 state hiring freeze and the need to maintain vacancies to ensure funds are available for program operations.

The 2005 Food and Drug Administration's Model Food Code, which is developed through the cooperation of industry and state and federal food regulators, recommends a minimum of three times a year for high risk facilities and twice a year for medium risk facilities. Low risk facilities should be inspected at least once a year.

Target #2: Less than 10% of inspected permitted food establishments and seafood processors have been issued a Notice of Violation (NOV).

Status #2: 34% of food establishments and 13% of seafood processors that were inspected and permitted were issued a Notice of Violation (NOV) in FY 2009.



Methodology: Sum of number of inspected permitted seafood processors (382) and permitted food establishments (1546) from the Food Safety and Sanitation Program's "Digital Health Department" (DHD) database. Number of Notice of Violations per category (Seafood = 20, Retail Food = 195) is from DHD.

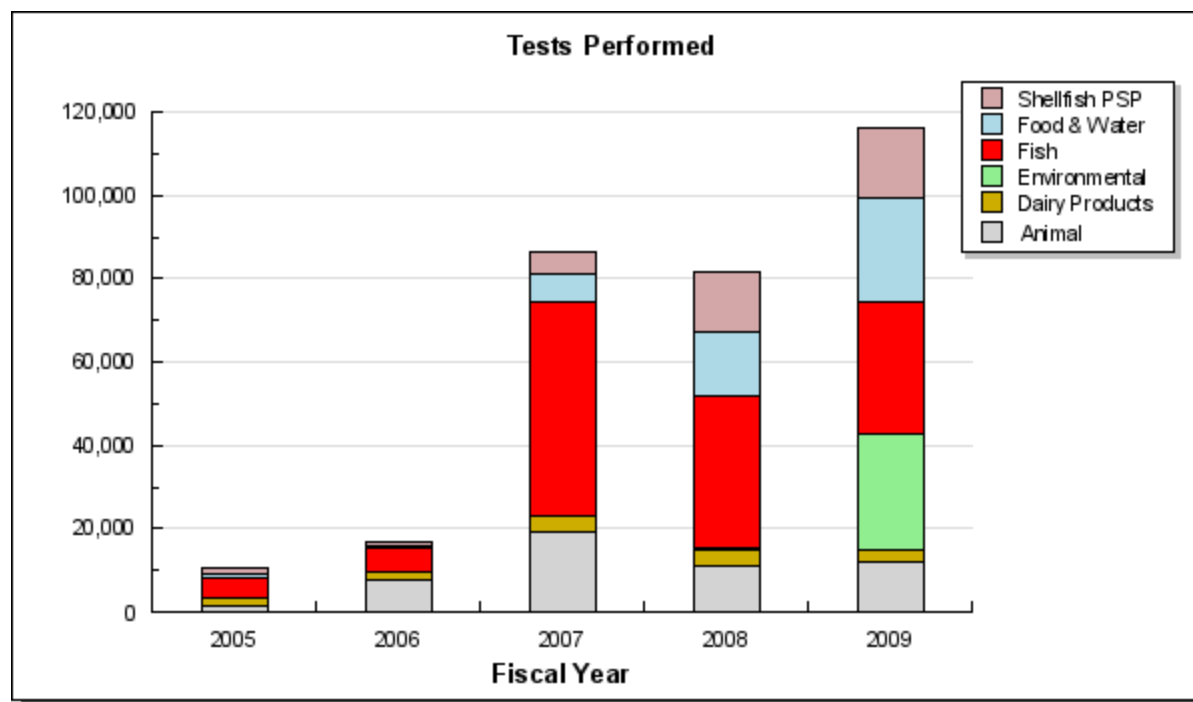
Analysis of results and challenges: The Food Safety and Sanitation Program has three FTE's that exclusively work with seafood compliance responsibilities out of the 24 full time equivalent (FTE) field positions in ten offices statewide.

In FY 2009 there were 797 permitted seafood facilities. 305 or 39% were inspected at least once. Staff were able to inspect 272 of these facilities as contract inspections funded by the Federal Food and Drug Administration (FDA). Some facilities are also inspected by FDA compliance officers and U.S. Department of Commerce (USDC) officers. Because FY 2008 was a partial year of data collection, it is unclear if FY 2009's inspections truly produced more NOV's or not.

In FY 2009 there were 4,420 permitted permanent food establishments, of which 1,319 establishments were inspected at least once. Inspections are only one part of an Environmental Health Officer's job as they are also responsible for conducting facility plan reviews, investigating complaints, participating in food recalls, providing technical assistance, and routine administrative matters. Travel time also impacts inspection frequencies. A new inspection form was instituted in FY 2009 which communicates compliance issues that a facility needs to resolve in a different manner than a NOV. Only facilities with egregious violations are issued NOV's, which is the first formal step in enforcement process.

Target #3: Increase the number and types of tests performed to support public health assessments.

Status #3: 116,223 tests were performed by the Environmental Health Laboratory in FY 2009, an increase of 42% from the previous year.



Methodology: All tests performed by the lab are logged and tracked from sample receipt through final testing and reporting.

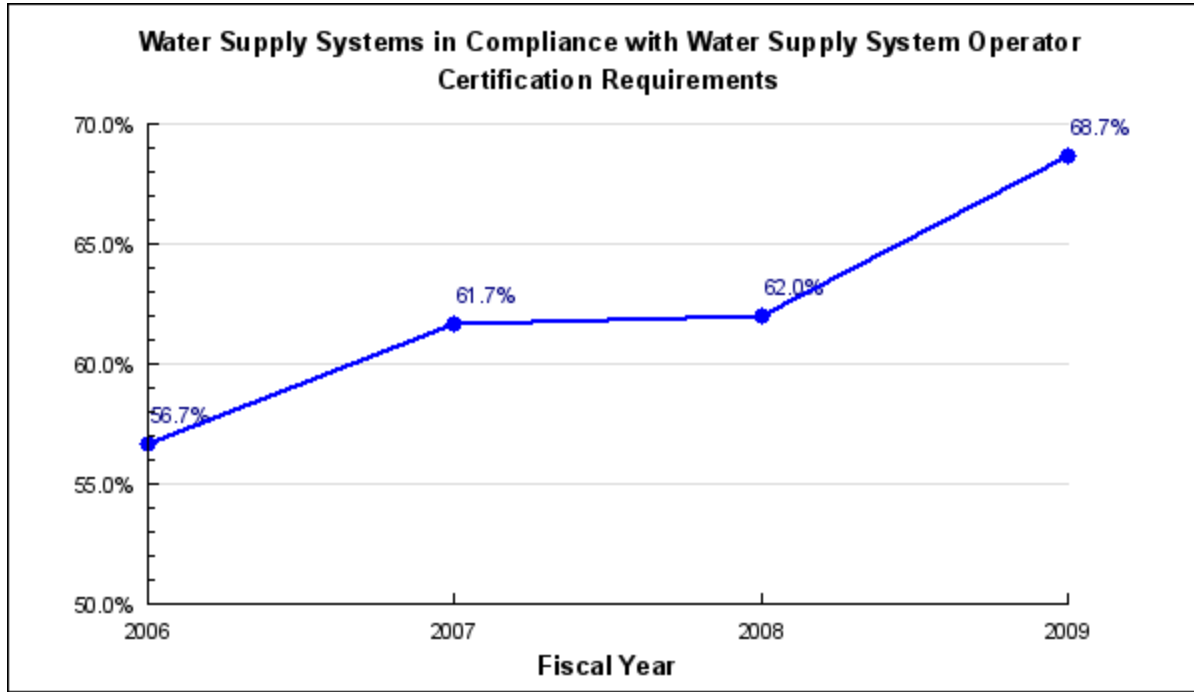
Analysis of results and challenges: The Alaska State Environmental Health Laboratory (ASEHL) became fully operational in January 2006. The purpose of the new facility was to bring increased capabilities and capacities to the State, which is clearly demonstrated in the statistical bar graphs from FY 2005 to FY 2009. Testing volume increased as the result of a myriad of factors: an International Standards Organization (ISO) based Quality Management Program requiring increased Quality Assurance and Quality Control (QA/QC) procedures; all new equipment requiring installation and validations; parallel testing for procedure validations, all new staff training; and development of many new tests. The changes are first evident in FY 2006, as animal testing increased with the start up of new molecular biology procedures for Avian Influenza and New Castle disease. In FY 2007, U.S. Fish and Wildlife Service increased the lab's Avian Influenza testing by sending their samples to the lab as part of a cooperative agreement. Also in FY 2007, fish tissue testing jumped 10-fold as new and more efficient multichannel chemistry analyzers provided testing support for state and federal projects.

In FY 2007 and FY 2008, both food and dairy testing increased because of samples from new cheese and milk producers; shellfish and related testing grew as well. Organic fuel testing procedures were developed in FY 2008 for future demands and environmental testing increased from 22 to 693 tests, consisting of solely validation and developmental testing. The decrease in animal testing in FY 2008 and FY 2009 is the result of a reduction in Avian Influenza samples submitted by State and Federal agencies as the sampling plan for Avian Influenza surveillance was changed. A similar decline in fish testing in FY 2008 and FY 2009 was the result of reduced Federal funding for analysis of non-salmon fish species in the Fish Monitoring Program.

Environmental testing increased in FY 2009, as the Organic Volatile tests were validated and added to the capabilities of the Chemistry Section. In addition, the Chemistry Section has been involved nationally in evaluating new testing procedures for marine toxins like Paralytic Shellfish Poisons (PSP). Investigations of water and marine products as well as food microbiological investigations associated with new cheese producers increased significantly in FY 2009. Overall, FY 2009 depicts the continuing growth of the ASEHL and its increased capability to provide testing support.

Target #4: 2% annual increase in the number of regulated systems that comply with water supply system operator certification requirements.

Status #4: The operator certification program has seen a 12% increase in three years for the number of regulated systems that comply with water supply system operator certification requirements.



Methodology: The number of water supply systems that employ an operator certified at the correct level is divided by the total number of water supply systems that are subject to this requirement. This calculation yields a decimal, which is multiplied by 100 to arrive at a percentage of water supply systems that are in compliance with this requirement. In FY 09, 430 out of 626 systems or 68.7% were in compliance with this requirement.

Analysis of results and challenges: Certification of water system operators validates that they have the qualifications necessary to safeguard public health. The State's Operator Certification (OC) program classifies water systems based on system size and complexity and determines whether operators have experience and knowledge commensurate with the system's classification. In order to assist operators with achieving certification, the OC program offers training and administers examinations.

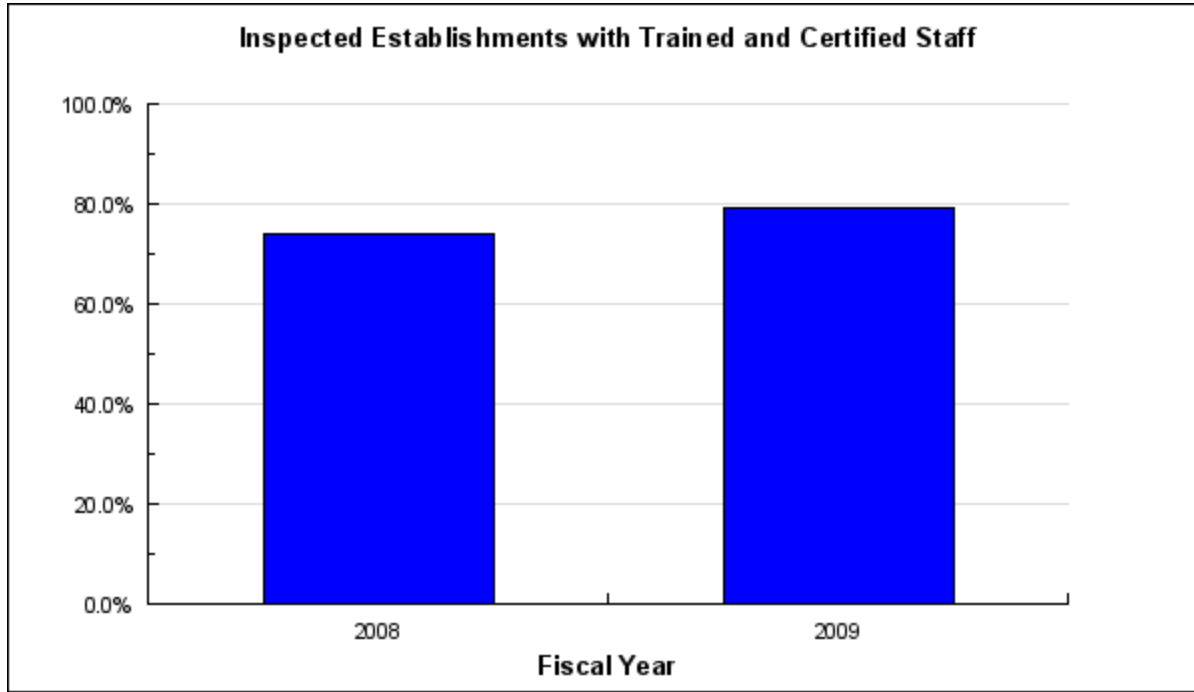
Although the OC program oversees certification in water treatment, water distribution, wastewater treatment and wastewater collection, this measure is limited to drinking water supply system certification as it is related most directly to public health. This measure also excludes systems with less than 25 users or systems where users obtain water on a house by house basis (private wells or rain catchments) since these systems are not subject to operator certification requirements.

This year, the OC program saw a 6.7% increase in the compliance rate. This increase can be attributed to several factors. Regulation changes have made certification more accessible to operators, which increased the number of operators testing for certification. The OC program has placed increased emphasis on compliance with program requirements through notification of non-compliance and follow-up, and has been working more closely with the Drinking Water Program on joint compliance issues. The OC program has increased the access to training through the Operator Reimbursement Program.

B3: Strategy - Enforce Safe Sanitary Practices.

Target #1: 100% of inspected permitted retail food establishments are found to have staff with required food safety training and certification.

Status #1: Approximately 79% of inspected permitted retail food establishments were found during inspection to have staff meeting food safety training and certification requirements, up 5% from the previous year.



Methodology: Data Collection began January 1, 2008; therefore this data only represents 7 months of the year. The total number of inspected establishments without either items 1 - Certified Food Protection manager, 2 - Person in Charge or, 3 - Food Worker Cards for all workers marked out as reported in Food Safety and Sanitation Program's "Digital Health Department" database. Calculated by dividing the number of establishments with safety training and certification by the number of inspected permitted establishments, as reported in the Food Safety and Sanitation Program's DHD database.

Analysis of results and challenges: The requirement for a workforce trained in food safety was established in the December 28, 2006 amendments to the Alaska Food Code. The requirement recognizes that primary responsibility for food safety lies with the food establishment that is procuring, storing, preparing and serving food on a daily basis. All food handlers must have basic food worker training and hold an Alaska Food Worker Card issued by the Food Safety and Sanitation Program. On-line training and testing is provided by the Food Safety and Sanitation Program. In addition, each establishment must have at least one Certified Food Protection Manager credentialed by a third party who is knowledgeable about food safety management practices and systems.

The program is continuing its aggressive industry education campaign. The food worker card continues to be free for newly certified workers until a fee collection mechanism is established. The program's online testing program is serving as a model for other food safety programs nationwide. Achieving a 79% compliance rate in less than two years, with only a partial year of data collection in the first year is a measure of the program's success in implementing the new requirement.